



“Discovering Hands” – Delivering accessible prevention of breast cancer by employing visually impaired women

Work Project based on a Business Project developed in collaboration with
McKinsey & Company

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1. Brief Context of the Business Project

1.1. Discovering Hands

Discovering Hands (DH) is a groundbreaking social program that trains visually impaired women on detecting early signs of breast cancer. By training blind women to become professional Medical Tactile Examiners (MTEs), the initiative promotes their inclusion into society. At the same time, due to this group's enhanced sensitive touch, it allows for a better precision on detecting breast cancer through the palpation method. MTEs are trained for 9 months to perform a 30-minutes standardized diagnostic method. Any finding is verified and interpreted by a physician straight after the exam. The Medical Doctor (MD) can afterwards, based on the report, decide whether or not the patient should be subject to another diagnostic test. Besides the ability to examine with higher precision, the DH method follows an extremely human approach, by providing enough time for the MTE to care, to listen and to educate the patient about breast cancer and its prevention. The program was launched in Germany in 2006 and has received until now very positive support and feedback.

1.2. The Business Project Challenge

The main objective of the Business Project was to determine whether it is possible to implement DH in the Czech Republic. It was also required to evaluate the potential impact of this implementation – supported by a financial model - and to create a short-term implementation plan.

1.3. Market Overview

It was essential to analyze deeply the demand – the patients; the supply – the visually impaired women; and other stakeholders – the main focus was on physicians, associations, and the possible training partners.

Breast cancer is the most common type of cancer for women in the Czech Republic and its incidence is predicted to increase (Appendix 1). Less than half of the cancers diagnosed are detected on the first stage (Appendix 2). Younger patients are particularly subject to later diagnosis. DH could therefore help to increase early

diagnosis, contributing for higher chances of recovery. It can fill a gap in the market that is currently not covered by any other diagnostic method. DH is seen as a complementary method to ultrasound and mammography, which can, along with its accuracy, provide extra psychological and educational benefits. Moreover, it can be a viable alternative for younger women to be screened, since they are not covered by any other method of prevention. The mammography-screening program, done every other year, only covers women above 45 years old.

In the Czech Republic, there is a pool of women from which DH can recruit MTEs that is proportional to the German one. Moreover, visually impaired women seem to be very receptive to this type of employment opportunity (Appendix 3).

Concerning other stakeholders, it was found an ideal training partner for DH in the Czech Republic. However, there are some limitations regarding the possible reaction of physicians towards the program. As opposed to Germany, MDs are not required to conduct palpation as part as the diagnostic tests, which can undermine their acceptance of the DH method.

1.3. Summary of Conclusions

In terms of operations, we considered the implementation of a model similar to the one present in Germany and Austria, in which MDs employ the MTEs on their facilities. However, some aspects specific to the Czech market made us consider another option, in which DH is the employer. On the first option, physicians receive the revenues from the examination but bear all the costs and may receive part of the support from the government. On the second option, the MDs only oversee the MTEs activity and receive a rent. DH receives the revenues, bears the costs and receives benefits from the government. Both options have their specificities but present sustainable results on the medium and long run.

DH is a concept that can benefit a large amount of stakeholders in the Czech Republic. It is important however to emphasize the impact on the integration of visually impaired women and on the increase on the chances of early detection of breast cancer, particularly for younger women that are not covered by preventive checks on the current system, by combining competence and a human approach.

2. Czech Physicians' Reaction to the DH Method

The DH method is based on the premise that the examination of women's breasts by MDs is a viable way to detect early breast cancer. It also assumes that the application of this palpation method by visually impaired women is likely to increase the probability of finding smaller lumps, leading to an increase on survival rates.

The main difference between the Czech market and the German one is the fact that doctors in the Czech Republic do not accept the clinical breast examination method as a valid one. Czech laws do not require physicians to conduct palpation when they are running diagnostic tests. Some physicians perceive palpation as an obsolete and not scientifically proven method. In Germany and in the majority of European countries however, MDs usually perform this method every time they complete a gynecological diagnostic test. Therefore, when implemented at a doctors' facility, the DH method can be seen in Germany as a substitution of the doctor's procedure, and hence physicians are willing to employ MTEs so that they can replace them (on a more efficient way) on that task.

2.1. Original Approach

The working group inferred by these facts that Czech physicians will not be as receptive towards accepting DH as the German or Austrian ones were. To tackle this downside, it was firstly considered the option of having the MTEs operating individually, providing the service independently of the doctors. However, after debating with the founders of the DH concept and analyzing the legal framework of healthcare procedures in the Czech Republic, it was reached the conclusion that it is compulsory to have a physician giving the final word on each procedure. Taking this requirement into account, it was decided that the implementation plan should incorporate the objective of trying to provide incentives for the MDs on accepting the method.

As mentioned above, regarding the operational plan, the original process in which physicians employ the MTEs was still considered. It was noticed however that employing the MTEs would result on a higher amount of workload and bureaucracy for MDs, and that there were cases in which physician's facilities might not fulfill the 50% employment

criterion – a criterion that states that if more than 50% of the employees of a medical facility are impaired (being that an impaired person counts as three non-impaired) the medical facility receives certain governmental benefits. To tackle these issues another option for operating the model on the Czech Republic was considered – the one in which DH itself would be the employer of MTEs. This option intends to provide incentives to the MDs in monetary terms (by assuring they receive a fixed and high enough commission for the services provided by MTEs) and incentives related to a non-increase on the workload and bureaucracy that would emerge in the eventuality of the employment of visually impaired women on their facilities. By solely adding this second operating possibility, it was assumed these incentives to be most likely enough for the physicians to accept the second hypothesis (if they do not accept the first one), in which they just oversee the MTEs activity.

2.2. Main Limitations of the Approach Used

It was never conducted a proper research or interview to understand the reasons why MDs do not perform the clinical breast examination method in the Czech Republic. Therefore, it is difficult to correctly identify to which incentives the doctors should respond to in order to accept giving the final word on the DH method.

According to our preliminary research MDs perceive the palpation method as obsolete and not scientifically proven, thus not contributing for the early detection of cancer. They state that, as it cannot be a substitute to mammography, it is not worth practicing. They even argue that if regularly done it might lead to increased anxiety on checked women and to an increased number of negative biopsies. They do not perform it also because of time constraints on preventive screening. Some even state that the method might be seen as a sexual harassment (Appendix 4).

Despite the fact that the DH method can tackle some of the issues pointed out by doctors, there are still some arguments that, being posed by physicians against the generic clinical breast examination, may also be posed against the DH method. They are very likely to argue that they will not have time to do the procedure (the palpation method takes about 2-3 minutes, and they would also need that fraction of time to analyze the DH method results); they are likely to argue that as palpation is not a scientifically proven

method, the DH method will not be better; and that the higher cancer awareness provided by the method may increase anxiety levels on women. In spite of the incentives provided by the second option, which aim for their acceptance, it is very probable that if physicians will not approve the first option, they will also not accept the second one.

The project will be presented to investors in the middle of June and it would be extremely beneficial for their understanding of the problem to know if physicians and the Ministry of Health would be on board to cope and agree with one of the two options. The fact is that if they do not accept any of the options, the MTEs course cannot be accredited, since it is a committee composed by physicians that may accept the accreditation. Additionally, even if the course is accredited, there might not be enough physicians that allow the execution of the DH concept on their practices. Some of the doctors were invited to the presentation on June, and they will be acquainted with method at the same time as potential investors, which might not be an ideal scenario.

Although there was no formal or extended interview, the working group contacted briefly a couple of doctors who disparaged the project and refused to provide interviews. There is nothing that guarantees that other doctors will not act on the same way.

2.3. Alternative Approach towards Dealing with Physicians

Having identified the fact that the physicians' approval of the concept is such a crucial aspect for its implementation, there should have been a more efficient effort on trying to understand the reasons why doctors do not support the palpation method. It was assumed by everyone within the working group that the second option could provide enough reasons for physicians to agree with the project. It was argued also that if it was not the case, then there was nothing else to do.

The research on physician's behavior and their incentives should have been deeper, since this is a highly educated group of stakeholders, which must be dealt with with particular attention. Along with a deeper scientific research on health professionals' incentive schemes, interviews to the physicians and people related to the medical sector should have been performed in order to understand their arguments and positions towards the clinical breast examination method and the DH one.

Physicians may not respond to the most common type of incentives, which are generally effective on other cases. Their decision to conduct a certain treatment is a result of many factors, which include more than a monetary stimulus or the level of bureaucracy burden. To understand better to which incentives doctors respond to, a parallel may be done with the decision of physicians to prescribe certain medicines. According to Mason A. (2008) the opinion of hospital doctors, pharmaceutical representatives and prescribing advisers are the main factors influencing MDs on their decisions. Moreover, they are slowly accepting the need for external scrutiny and national standards, and more willing to act according to them. Costs are typically of lower importance than both safety and efficacy concerns, and the impact of financial incentives on prescribing behavior remains unclear, but is unlikely to be straightforward. This reinforces the possibility of both workload and monetary incentives being not valued by MDs. If this is the case, then it might be that if physicians will not accept the first option, they will also not accept the second one.

It was distinguished on the implementation plan a phase in which some lobbying would be done towards the medical sector. This phase would be after the presentation of the project to the potential investors. However, it is quite straightforward that potential investors will want to know the opinion of MDs and their views on the project in order to get a full vision of the implications of its realization.

It should have been instead prepared another alternative for the case in which MDs are not convinced by neither one of the options. This alternative should include a plan to persuade them to consider and hopefully accept the DH method. The fact is that DH believes firmly in this project and has preliminary results that may prove its efficacy. After a careful research, all of the working team was also convinced on the benefits of the project, especially due to the fact that young women are not preventively covered by the Czech system, as opposed to the vast majority of other European Countries and the United States. Therefore, it is very likely that investors will also care about implementing it – since, being this a social project, one of their major concerns is the positive impact it will have on society. Had we done the interviews, we would have known whether the design of this alternative option was needed or not.

Once again making a comparison with the pharmaceutical industry, it is one of the strategies of some pharmaceutical companies (which according to specific guidelines cannot pay the doctors to use their medicines), to ask them to be the speakers for their campaigns. It was found out that doctors end up prescribing more of that certain drug just by being educated about the medication and having to speak to other colleagues about it. Hurley et al. (2014) also find that giving free samples of certain treatments to physicians increase the prescriptions of that treatment towards patients. These examples emphasize the important role education and familiarization with a certain drug or practice might have on physicians' decisions.

Therefore, it could have been designed a draft of an education and awareness program for Czech physicians. This could include a DH education seminar, with perhaps MDs from Germany and Austria that currently implement the method on their practices sharing their views. It could also include providing female gynecologists with free DH exams, particularly the ones bellow 45 years old, so that they can experience all the advantages of the method, including the human approach. Another way to possibly influence the implementation of the method on the Czech Republic would be to conduct a deeper research on the European Union Health guidelines, to infer on whether it is possible to enforce the palpation method as part of preventive screening in the Czech Republic. Legal norms would certainly be an efficient way to insert the DH method on the Czech system.

3. Reflection on Learning

3.1.Previous Knowledge Learned From the Masters Program

I consider that I have applied concepts from mainly three subjects from my Masters – Health Economics, Finance and Strategy. Due to my learning on Health Economics, I was aware of the specificities of this type of market and the different behaviors of the parties involved – patients, physicians, insurance companies and the government. I was only able to conduct a detailed financial analysis and to discuss the financial aspects of the project with McKinsey consultants and the stakeholders because of the practical knowledge I have learned in my Masters. The Strategy courses allowed

me to understand that it is crucial to always have in mind the creation of value in order for a project to be successful. That knowledge was a constant reminder that there should be a concern not only with the competitive positioning of a certain business in terms of price and interaction with competition, but also a focus on the value of its unique resources (value that results from the its assets and capabilities). This notion was in this case enormously relevant since it guided the working group to emphasize all the psychological advantages and time allocated for the customers (patients) that this method provides – which positions it on a very privileged situation.

3.2. New Knowledge

It was a great privilege to work with such professional consultants and challenging individuals on this project. It was an extremely motivating consulting project as it provided an opportunity to apply managerial methods on a philanthropic mission. With the company tutors, I have learned to apply many frameworks used by consultants – namely how to structure a PowerPoint presentation, and how one can use different ways of presenting the same results depending on the stakeholder being reached. I believe the opportunity of presenting the project to potential investors will be a particularly important experience I will acquire. I was presented with some very useful methodology tools to approach a problem – I learned how to structure my thinking (first start by analyzing on a general way the demand, then the supply, then other stakeholders and throughout the project starting digging deeper into each area); how to effectively use scientific methods to solve apparently challenging and confusing issues (using a “funnel” to reach a certain needed number for example) or how to best divide tasks within a team, among others.

3.3. Personal Experience

I consider that one of my strengths during this project was having always in mind that it was a social consulting project and that the investors will, as a consequence, be also interested on the benefits it can provide to society – namely to the government, to patients, and to the visually impaired. It was frequent for the rest of the team to forget this fact and focus solely on the financial aspects, trusting that the investors would care solely on the profitability when financing DH.

Regarding my weaknesses, the fact that I am Portuguese and do not speak the Czech language did not allow me to contact directly with many relevant stakeholders. Moreover, the fact that I have just learned finance on my undergraduate program or integrated on other courses during my masters, forced me to review some of the concepts and to take more time to understand some notions used on the financial model preparation. Since the first weakness is not dependent on my efforts, I believe that my main personal development objective based on this experience should be to try to improve my knowledge on financial matters. Wanting to pursue a career in Economics, I believe it will be relevant to acquire a deeper knowledge on that area in order to be able to clearly evaluate the implementation of certain projects or policies.

3.4. Benefit of Hindsight – What Added Value & What Should Have Been Done Differently

The nature of this project implied the existence of a very large team – every week there was a meeting with the three students, the two company tutors, an entrepreneur and a representative of DH. It was sometimes hard to manage such a large and international team but the overall result ended up being extremely positive due to the mix of several points of view and the different inputs each of the members were giving to the project. However, it would have been more advantageous to have more sessions with just the students and the company tutor, since the different members of the enlarged team had short-term objectives different from ours.

References list

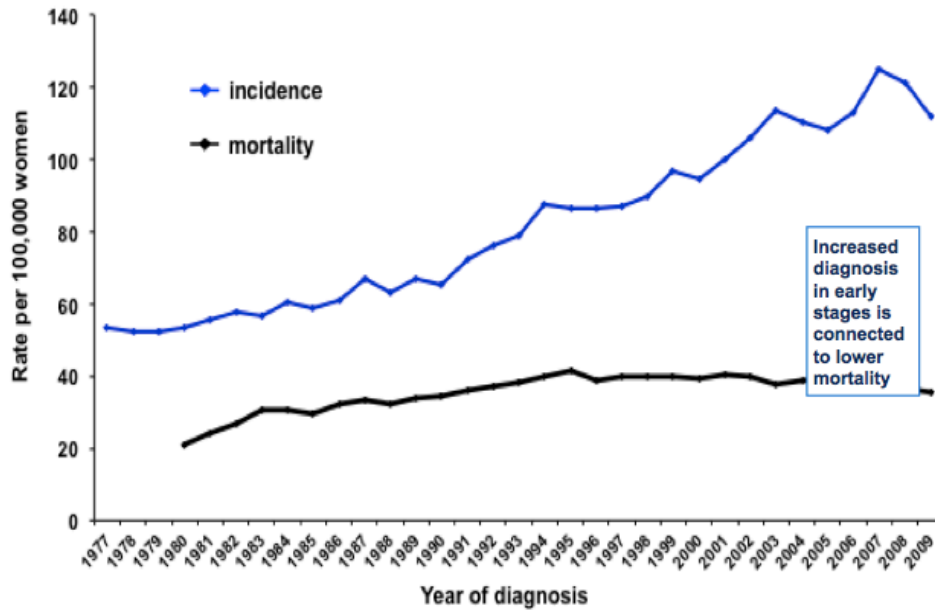
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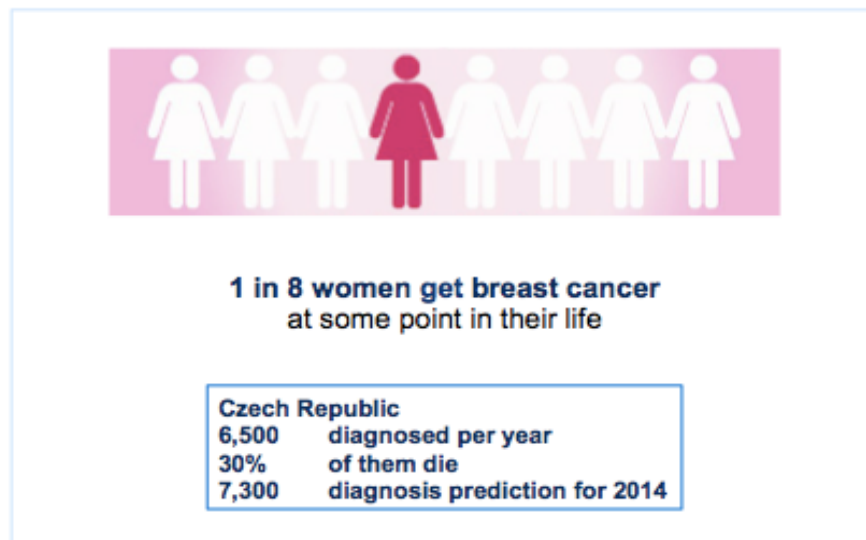
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APPENDIX

APPENDIX 1



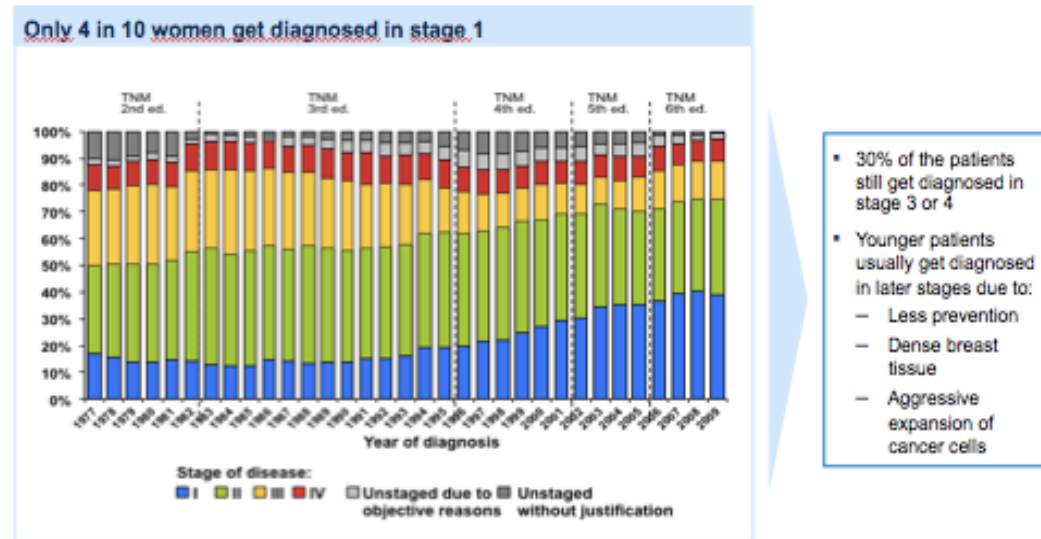
Breast cancer is the most common type of cancer for women in the Czech Republic



Source: Czech National Cancer Registry (CNCR)

APPENDIX 2

DH can increase early detection and give women a higher chance of survival

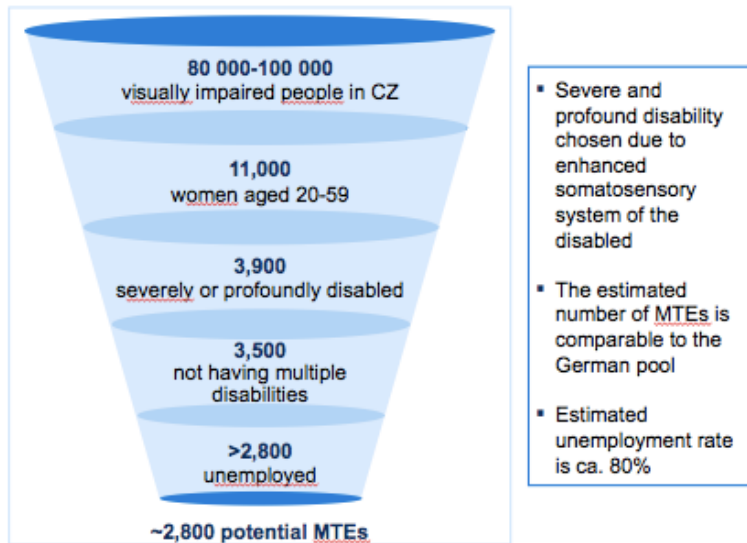


0-2 early stages
3 - size of 5+ cm
4 - metastasis

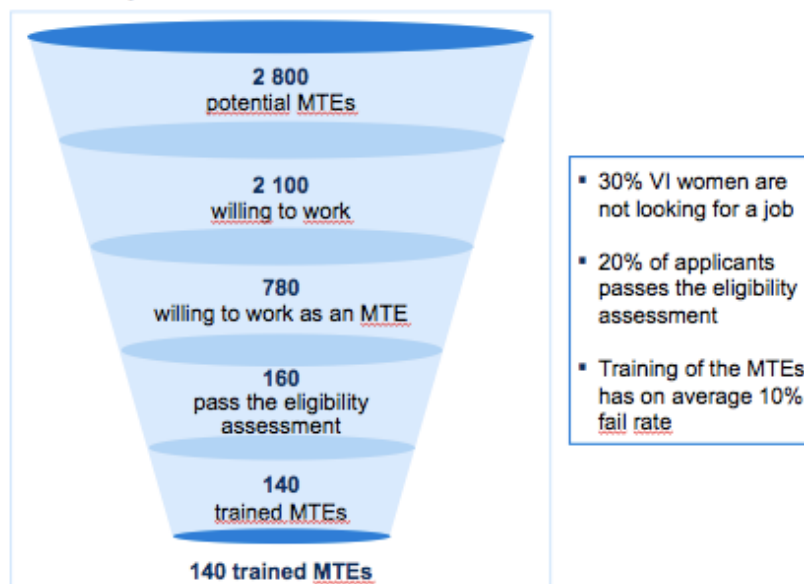
Source: Czech National Cancer Registry (CNCR)

APPENDIX 3

According to the requirements there is a pool of 2,800 women from which DH can recruit MTEs



Estimated cap of MTEs is set to 140 based on the course's specifics, educational requirements and the interest of VI women



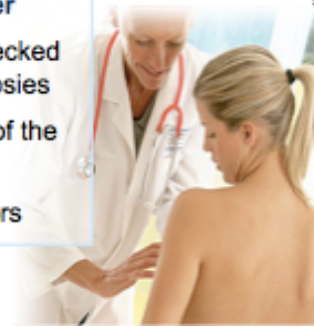
Sources: Czech Blind United (SONS), Czech Statistical Office

APPENDIX 4

Perception of palpation by Czech doctors negative causing the Czech health system to turn away from palpation, heavily promoting mammography

Czech doctors believe that palpation is ...

- **An obsolete method**
- Only an „auxiliary method“
- Not in any case a substitute for technical examination (ultrasound, mammography)
- **Not a scientifically proven method – i.e. palpation does not contribute to early detection of cancer**
- If regularly done, leads to increased anxiety in checked women and an increased number of negative biopsies
- Not doable because of time constraints as a part of the preventive screening
- Could be seen as **sexual harassment** from doctors



Source: Publication called “Modern Gynecology“ by Aleš Roztočil (published by Grada in 2011), Official website of the Cervical Cancer Screening Programme in the Czech Republic